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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,772	12/22/2000	Yoshiki Uchida	36J.P267	7034

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EXAMINER
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WU, JINGGE

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 03/11/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/745,772

Applicant(s)

UCHIDA, YOSHIKI

Examiner

Jingge Wu

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-6, 12-14, 16-17, 23-25, 27-28, 34-36, 38-39 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5488670 to Suzuki et al.

As to claim 1, Suzuki discloses an image processing method, compressing the step of :

inputting image data (fig. 6, 100);

performing block selection of objects in the input image data (abstract, col. 2 lines 5-64);

discriminating whether each block of the input image data is character or non-character data (figs. 3a-3c, col. 3 line 3-col. 4 line 55, col. 7 line 55-coll. 8 line 34);

detecting a feature (background color or foreground color) of each block of character data without utilizing edge portion of the character data (col. 2 lines 53-64, col. 3 line 3-col. 4 line 55)

performing an image process on each block of the character data based on the detected feature of the character data and the non-character image data (col. 3 lines 28-35, edge emphasis and compression); and

outputting the processed image data (fig. 6).

As to claims 2 and 3, Suzuki further discloses the background and foreground (character) color (col. 2 lines 53-64).

As to claim 5, Suzuki further discloses detects edge portion of the character data and utilizes portions of the character data internal to the edge portion in detecting the

feature of the character data (fig. 5a-c, col. 5 line 40-col. 6 line 28, col. 7 line 5-col. 8 line 34).

As to claim 6, Suzuki further discloses performing color conversion processing of the image data before the outputting step (fig. 6, 112).

Claims 12-14, 16-17, 23-25, 27-28, 34-36, 38-39 are the corresponding image processing apparatus. Computer-executable process, and computer-readable medium claims to claims 1-3, and 5-6 respectively. The discussion are addressed with regard to claims 1-3, and 5-6.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 15, 26, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of US 5818317 to Funada et al.

As to claims 4, 15, 26, and 37, Suzuki mentions edge enhancement (emphasis) on character data (col. 3 lines 28-35) but does not explicitly mention smoothing on non-character data that is well known in the art.

Funada, in an analogous environment, discloses edge emphasis on character data and smoothing on non-character data (fig. 28, col. 20 lines 36-45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Funada in the method of Suzuki in order to obtain better quality of image (Funada, col. 1-2

5. Claims 7-8, 18-19, 29-30, 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of US 5751921 to Fujimoto.

As to claims 7-8, 18-19, 29-30, and 40-41, Suzuki does not explicitly mention thresholding average color of block.

Fujimoto, in an analogous environment, discloses distinguishing the character color by thresholding the average color of the block and determining the color of the character (fig. 19, col. 8 line 60-col. 9, line 24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Fujimoto in the method of Suzuki in order to accurately emphasis the character image data to improve the quality of the image (Fujimoto, col. 1 line 18-col. 2 line 23).

6. Claims 9-10, 20-21, 31-32, 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of US6631207 to Hirota et al.

As to claims 9-10, 20-21, 31-32, 42-43, Suzuki does not explicitly mention processing mode for discriminating the character data that is well known in the art.

Hirota, in an analogous environment, discloses using a document mode or other processing modes (col. 17 lines 53-65) for discriminating the character data and based on the image type (document or character or photo) (col. 17 lines 42-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Hirota in the method of Suzuki in order to better emphasis the edge of the character data (Hirota, col. 1).

7. Claims 11, 22, 33, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of US 5920655 to Makita et al.

As to claims 11, 22, 33, and 44, Makita does not explicitly mention processing plurality the character data of a word that is well known in the art.

Makita, in an analogous environment, discloses processing plurality the character data of a word (fig. 23 a-b, note that the word has two characters).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scheme of Makita in the method of Suzuki in order to better recognize the string of characters (Makita, col. 1-2).

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6148102 to Stolin and US 5420938 to Funada et al. disclose methods for processing the character image data.

### **Contact Information**

9. Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (703) 308-9588. He can normally be reached Monday through Thursday from 8:00 am to 5:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (703) 306-0377.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amelia Au, can be reached at (703) 308-6604.

The Working Group Fax number is (703) 872-9314.

Jingge Wu

Primary Patent Examiner

